Date: Mon, 1 Nov 93 08:34:45 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1299
To: Info-Hams

Info-Hams Digest   Mon, 1 Nov 93   Volume 93 : Issue 1299

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 28 Oct 1993 10:54:23 -0400
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!gatech!concert!dante.exide.com!
dante.exide.com!not-for-mail@network.ucsd.edu
Subject: 6 Meter QSO's wanted
To: info-hams@ucsd.edu

I have been active on 6 meters for about 3 months. I have worked states including
North Dakota, NC, VA, MD, FL, and Texas. I am looking to increase my grids and
states
worked.

Anyone who is interested in running a sked with me on 6, please contact me via E-
mail

and we can set something up. I am looking for morning (Around 1030Z) and evening
(2200 - 0400 Z) possibilities and daytime on weekends. If you need NC or FM05 or would just like to make some contacts on 6, let me know.

I have a decent station - Icom 575H 100 Watts, 5 element Yagi.

Also listen out around 2300Z each night. There are a group of stations in FM05 and
FM06 that hang out on 50.125.

See You On Six!
73 de KD4BFJ
Brian

Date: Mon, 1 Nov 1993 12:00:14 GMT
From: nevada.edu!news.unomaha.edu!news@uunet.uu.net
Subject: Amateur Radio Elmers List Info and Administrivia
To: info-hams@ucsd.edu

Posted-By: auto-faq 2.4
Archive-name: radio/ham-radio/elmers/admin
Revision: 1.4 04/25/93 23:02:45
Changes: pit-manager.mit.edu is now rtfm.mit.edu

This administrivia file and the companion Amateur Radio Elmers Resource Directory are intended for non-commercial distribution via Usenet. Any other uses, please E-mail for permission.

A Brief Historical Overview:
++++++++++++++++++++++++++

If there is any one constant in the changing state of the communications art, it is that "Hams" (Amateur Radio Operators) have always been on the forefront of it. Rumors abound where the term "Ham" came from. Some of the more amusing are described at the end of this article.

Regardless of origin of the name, a "Ham" is universally recognizable as one who experiments in radio and communications.

Whether it be constructing a low-power CW radio with vacuum tubes, or designing TCP/IP packet networks, such experimentation has historically spilled over into the mainstream such as was the case with Edwin Armstrong, who developed the regenerative oscillator and FM radio, or General Curtis LeMay (W6EZV) who was instrumental in making Single-

Sideband the communications standard for the Strategic Air Command (1947-1992, now reorganized into a joint command called StratComm) and eventually the U.S. Air Force. Although packet-switching techniques originated from DARPA (Defense Advanced Research Projects Agency) and the ARPANet, no one can deny the tremendous influence that amateurs have had in demonstrating the viability of TCP/IP and AX.25 communications via radio links. The efforts of AMSAT (the Amateur Satellite Corporation), including the development of many ham satellites and the low-orbiting Microsats (communications satellites no bigger than a breadbox that use store-and forward packet techniques), have certainly advanced the state-of-the-art in communications, one of the defined purposes of the Amateur Radio Service, as recognized by international treaty.

Since in many cases hams are writing "the book", there is often no "book" or other established reference for a beginner to refer to. Traditionally, information has been passed on from ham to ham via word-of-mouth. Like many of the traditional crafts, a variation of the Master-Apprentice system has emerged, the Elmer-Novice relationship. Called "Elmers" because they are usually older and wiser, having the benefit of many years in the hobby, including several failed projects, and an electric shock or two, they have traditionally been the mainstay of amateur radio, and the source of many new hams, particularly those interested in working on emerging technologies.

Even more importantly, Elmers provided an outlet for the impatient newcomer who wanted "to know everything, and right away." Faced with such a request, a good Elmer will smile and proceed to lead the novice through some project or operating experience. Several hours, days, or weeks later, the novice would have his answers, but would have earned them. Even better, the sense of accomplishment would boost the novice's confidence and nudge him or her down the road to being a model, experienced ham operator.

Many present hams feel that such an experience is missing today. In today's hustle-bustle world, the response to such natural curiosity and desire to learn is, more often than not, "I'm too busy" or "RTFM." As a result, the quality of new hams declines and the knowledge and operating habits they develop in their first formative months and years leave much to be desired. And the very same hams who claim that they "can't understand the new generation" also, in almost the same breath, lament about the "decline of amateur radio."

What is an Elmer today?
++++++++++++++++++++++

An Elmer today is of any age, male or female, who has some expertise and is willing to share it with beginners. Elmers don't even need to be

licensed amateurs, just people with knowledge in some area of electronics or communications technology.

What is a Usenet Elmer?
++++++++++++++++++++++

With the ever-widening scope of the Internet, and the amateur radio newsgroups on Usenet, the potential for Elmers to share their knowledge to a wide audience has never been greater. To that end, I have started to maintain a list of such Elmers. Volunteers need only send me their name, E-mail address, and area of expertise. I have set up an administrivia mailbox for this purpose (elmers-request@unomaha.edu, the default Reply-To: of this message).

Those desiring a more extensive list, or who need more specific assistance, are encouraged to contact Rosalie White, WA1STO, Educational Services Manager at the American Radio Relay League, 225 Main St., Newington, CT 06111 or via electronic mail addressed to rwhite@arrl.org.

How may I obtain the latest copy of the Elmers List?
++

There are currently 4 ways of obtaining the Elmers List. Any site at least reachable by Internet E-mail can use options 3 or 4:

1. Usenet News: The latest copy of the list can be found in the companion posting to this message, "Amateur Radio Elmers Resource Directory." Since the list is cross-posted to rec.radio.amateur.misc, rec.radio.info, rec.answers, and news.answers on the 1st of each month, with an expiration date 6 weeks into the future, there should always be a copy available at most news sites. Check your newsreader documentation for information about reading previously-read articles.

2. Anonymous FTP: If your site is directly connected to the Internet, you may retrieve the latest copy via File Transfer Protocol (FTP) from the following sites:

ftp.cs.buffalo.edu /pub/ham-radio/elmers*
rtfm.mit.edu /pub/usenet/news.answers/radio/ham-radio/elmers/*

3. Mailing-List: Since the list is cross-posted to rec.radio.info, the latest copy may be obtained from the mailing-list gateway for that newsgroup (along with many other informational articles about radio) when it is published each month. To subscribe, send E-mail to:

listserv@ucsd.edu

and in the BODY (not the Subject) of the message, write:

subscribe radio-info

The server may not be able to determine your return address. In that case write:

subscribe radio-info (your E-mail address)

You should get an acknowledgement very shortly.

4. Mail-Server: If you don't want to read through the entire gateway of rec.radio.info, or want a copy of the list right away, send E-mail to:

mail-server@rtfm.mit.edu

and in the BODY (not the Subject) of the message, write:

send usenet/news.answers/radio/ham-radio/elmers/admin
send usenet/news.answers/radio/ham-radio/elmers/list
send usenet/news.answers/radio/ham-radio/elmers/diff

and the latest copy of the list should be sent to you E-mail within 24 hours (the mail-server uses batch priority to reduce system demand).

How may I contribute to the Elmers List?
++++++++++++++++++++++++++++++++++++++

By using this resource, you are benefitting the net by obtaining assistance in the fastest and most efficient way possible. By volunteering to appear on this list, you are contributing to the good reputation of the radio-related newsgroups.

Thanks to all the volunteer Elmers, as well as courteous list users, for making this service a success.

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

* Possible origins of the word HAM:

The acronym "Home Amateur Mechanic" or...

from the Cockney pronunciation of "L'amateur" or...

the initials of the founder of the American Radio Relay League, Hiram Maxim, W1AW (his actual middle name being Percy apparently notwithstanding) or...

from the call letters of one of the first amateur stations at Harvard, H.A.M. (please, no flames from W1XM at MIT)

Dale Mosby, N7PEX, offers the explanation that HAM must stand for "Hardly Any Money," considering the investment one could make in the hobby.

Knowledgeable individuals from the American Radio Relay League (ARRL), and other radio historians, seem to agree that the terms "Ham" and "Lid" (an inept operator) both originated with landline telegraphy. A "Ham" was a show-off and a "Lid" was a telegraph operator so inexperienced, he had to use a pot or can lid to rest his telegraph sounder on to properly copy the code.

As an interesting historical footnote, early telegraph operators may have been the first to experience the infamous curse of our communications age, Repetitive Stress (or "Carpal Tunnel") Syndrome (called "Glass Arm" in those days, which encouraged the invention of the semi-automatic or "bug" key).

(Larry E. McDonald, N6ZMB, wrote to point out another plausible origin, which doesn't necessarily contradict the ARRL version. The term "ham" may have been derived from "ham-fisted" or "ham-handed" to describe poor telegraph operators who were hired from the ranks of radio operators. Or maybe "ham-fisted" and "ham-handed" are derived from "ham." Who knows?)

Date: Mon, 1 Nov 1993 12:04:25 GMT
From: nevada.edu!news.unomaha.edu!news@uunet.uu.net
Subject: Changes to Amateur Radio Elmers Resource Directory
To: info-hams@ucsd.edu

Posted-By: auto-faq 2.4
Archive-name: radio/ham-radio/elmers/diff

(Note: This diff file is taken from the list body only.)

/usr/bin/diff -c (last month's) (this month's)

*** /u3/pschleck/faq/elmers/list.body.old Fri Oct 1 06:00:48 1993
--- /u3/pschleck/faq/elmers/list.body.new Mon Nov 1 06:00:07 1993
****

```
*** 1,4 ****
! Amateur Radio Elmers Resource Directory (as of 10/01/93)
  ++++++++++++++++++++++++++++++++++++++++++++++++++++++

  David Andrews ZL2SX
--- 1,4 ----
! Amateur Radio Elmers Resource Directory (as of 11/01/93)
  ++++++++++++++++++++++++++++++++++++++++++++++++++++++

  David Andrews ZL2SX
***************
*** 35,64 ****

  ++++++++++++++++++++++++++++++++++++++++++++++++++++++

! Jay Appell --> KA1SNA

! 1976-1978 FCC Personal Users Radio Advisory Committee
!           Task force for Rules Rewrite Citizens Radio Service
!           Rules interpretation

! Currently work for Stratus Computers/Technical Support Engineering

! Address: Jay_Appell@cac.stratus.com
! Telephone: 1-800-458-0042 X2548

! I enjoy Amtor, RTTY, and SCA reception.

! If you would like to leave me mail by modem, use the BBS 1 Hopedale Center
! at 508-478-6969. This is a new amateur BBS running from 7AM to 7PM EDST. The
! board usually runs beyond 9PM daily. Until I can get another server, online
! times will vary. We honor modems running 9600 baud/MNP 5.

! Discussion groups have been setup for all ham radio vendors. Comments shared
! on this BBS will be conveyed to the ham radio company referenced in the forum.
! This platform will make companies aware of how the amateur radio community
! feels about their products. Please indicate otherwise if you don't want the
! comment forwarded.

  ++++++++++++++++++++++++++++++++++++++++++++++++++++++

   """""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""
--- 35,72 ----

  ++++++++++++++++++++++++++++++++++++++++++++++++++++++

! Jay Appell -->  KA1SNA
```

! 1976-1978 FCC Personal Users Radio Advisory Committee
!   Task force for rules Rewrite Citizens Radio Service
!   Rules Interpretation

! 1988-Present Stratus Computer/ Technical Support Engineer

!   I am CEO of Creative Media Productions a multimedia consulting
!   company.

! Address: Jay_Appell@cac.stratus.com
! Telephone: 1-508-478-6969 X200 at Creative Media Productions
!   1-508-478-1429 24 Hour Ham radio BBS and other topics
!

! I enjoy SCA reception and multimedia use in Amateur Radio. If anyone would
! like to reach me by modem, 508-478-1429 (24 Hr) BBS 14,400.

! I have been referred to as the ham responsible for digital users manuals
! in amateur radio. The first manual was the DJ-590 and subsequent manuals
! included the 560,580 and 600 for Alinco. My contacts in the amateur radio
! community have helped other amateurs to know more about products, hidden
! features and new product offerings. The BBS will now included the latest
! info on YEASU and ALINCO products. If you have a product that you wish to
! have evaluated for the general amateur community, please contact before
! sending.

+ If you have questions with regard to customer service at these
+ companies, please forward to me and they will be passed to the company
+ contacts.
+
  ++

   """
****
*** 208,213 ****
--- 216,222 ----
  Robert (Bob) Carpenter W3OTC

  rc@cmr.ncsl.nist.gov
+ w3otc@amsat.org

  6 meter SSB DX
  Central States VHF Society
****
*** 346,351 ****
--- 355,370 ----

  ++

+ David Dodell   WB7TPY
+
+ Internet: david@stat.com   FAX: +1 (602) 451-6135
+ Bitnet: ATW1H@ASUACAD   FidoNet=> 1:114/15
+   Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na
+
+ ampr.org IP Coordinator for Arizona subnet (44.124.xxx.xxx)
+
+ ++
+

  Thomas Edwards N3HAU

  tedwards@eng.umd.edu
****
*** 411,416 ****
--- 430,452 ----

  ++

+ ==
+ | Scott Ehrlich   Internet: wy1z@neu.edu |
+ | Amateur Radio: WY1Z   AX.25: wy1z@wa1phy.#ema.ma.usa.na |
+ |--|
+ | Know your weaknesses, show your strengths - Anonymous |
+ ==
+
+ Maintainer of the Boston ARC FTP area on world.std.com - check it out!
+ (Featuring amateur radio software for the Macintosh and ARRL files from
+ info@arrl.org)
+
+ I've been playing with most models of Macs from the 512 on up for a
+ number of years now. I'm also great with DOS, UNIX, and my VMS isn't
+ too bad, either. :)
+
+ ++
+

  Reciprocal Licensing (South Pacific)
  VHF (Propagation, Power Amplifiers)
  Satellites (Project Oscar)
****
*** 643,657 ****

  ++

! Ian Kluft KD6EUI PP-ASEL   Amdahl Corporation
! Internet: ikluft@uts.amdahl.com   UTS Systems Software Division
! Packet Radio: kd6eui@n0ary.#nocal.ca.usa.na   Santa Clara, CA

```
!  [disclaimer: any opinions expressed are mine only - not those of my employer]

  Maintainer of rec.radio.amateur.misc and rec.radio.cb FAQ lists

  Please direct all FAQ submissions, feedback, and administrivia to
! hamradio-faq@amdahl.com or cb-faq@amdahl.com.

  A mailing list for rec.radio.amateur.* FAQ and Netiquette posting
  maintainers, as well as anyone with a sincere interest in helping
--- 679,691 ----

  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++

! Ian Kluft  KD6EUI PP-ASEL
! ikluft@thunder.sbay.org (home)  ikluft@uts.amdahl.com (work)   Santa Clara, CA

  Maintainer of rec.radio.amateur.misc and rec.radio.cb FAQ lists

  Please direct all FAQ submissions, feedback, and administrivia to
! hamradio-faq@kluft.com or cb-faq@kluft.com.

  A mailing list for rec.radio.amateur.* FAQ and Netiquette posting
  maintainers, as well as anyone with a sincere interest in helping
***************
*** 922,927 ****
--- 956,978 ----

  Novice training, local VE for Novice-Tech tests,
  General questions
+
+ ++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+
+                                                 _________   _________  The
+ Scott Rosenfeld                                          \ /  Long   Original
+ ham@wam.umd.edu  Amateur Radio NF3I  Burtonsville, MD   |   Live    $5.00
+   WAC-CW/SSB  WAS  DXCC - 109 QSLed on dipoles _________| Dipoles! Antenna!
+
+ Contact VE, University of Maryland ARA (W5YI VEC)
+
+ CW, HF DX, and QSLing
+
+ I'm by no means a QSL expert, and I don't even get the GO-list or have a
+ packet setup to get into the local packetcluster - but I'm always glad to
+ help out with practical QSLing tips.  I still haven't been able to get
+ any cards out of ex-Soviet Asia, and I don't know that I ever will, to be
+ honest.  Oh well, I'll just keep trying.

  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

Date: Mon, 1 Nov 93 12:54:58 GMT
From: agate!howland.reston.ans.net!pipex!uknet!uos-ee!ee.surrey.ac.uk!
M.Willis@ames.arpa
Subject: ICOM IC275H Modifications
To: info-hams@ucsd.edu

I have heard a rumour that it is possible to modify these to do pass band tuning.
Apparently it is on the PCB but for legal reasons, ICOM took it out and put a
silly
DATA LEVEL pot in place on the front panel. Does anyone know how to re-enable this
rather useful facility?

Secondly, the front end is good, low noise etc. The same cant be said for the
audio
amplifier. How might that be fixed? Audio hiss, especially with the narrow CW
filter is higher in amplitude than the band noise!

73 Mike

Date: Mon, 1 Nov 93 12:50:30 GMT
From: agate!howland.reston.ans.net!pipex!uknet!uos-ee!ee.surrey.ac.uk!
M.Willis@ames.arpa
Subject: Mirage Amplifiers in Repeater Service
To: info-hams@ucsd.edu

In article <CFoyH9.GD3@world.std.com>, dts@world.std.com (Daniel T Senie) writes:
|> In article <2amph6$1n8@news.acns.nwu.edu> jweiss@casbah.acns.nwu.edu (Jerry
Weiss) writes:
|> >

|>
|> We tried a mirage amp on a repeater. After it destructed, I took it apart. The
|> thing was VERY poorly designed. They really do not design these things for
|> continuous duty (or even heavy intermittent use) and then put stickers on the
|> sides that say "Warranty void if seal broken" so that people will not see
|> the poor construction inside.

|>
|> As N1JIT said: From a distance it looked like a Mirage, when we got closer
|> it was just a pile of sand...
|>
|> A repeater-rated amplifier is definitely worth the extra money, though the
|> best ones I've seen are homebrew FET designs. If you are looking for non-
|> repeater use amplifiers, look at the RF Concepts ones. Their designs are
|> much cleaner than Mirage, and they TELL you to open up the thing to make
|> certain adjustments (positive vs. negative keying, adding remote control).
|>
|> TE Systems makes VERY nice amps, and they also have repeater versions
|> (rated for 100% duty cycle).
|>

I have what appears to be a 100W 120MHz police repeater amplifier. I have
modified it to run 144 MHz and biased it for ssb. It has four 150W output
bipolar devices in the final stage. It will give over 400W out when driven hard,
and about 300W PEP in linear mode. Although the devices can handle the power the
heatsing could not and the output matching network made from co-axial lines
(wilkin
son combiner) gets very hot. It can run 100W all day every day, even after the
antenna has blown down. You need this level of overdesign for reliable service.
For
an amateur amp of this quality you would expect to spend well over $1K in
quantity.
Amateur amps are so cheap you realy can't expect them to produce full output
cleanly and continuously. What we get for the money, especially some of the moder
radios, is really quite remarkable.

Mike

Date: 31 Oct 93 11:30:00 GMT
From: elroy.jpl.nasa.gov!swrinde!gatech!udel!news.sprintlink.net!crash!filebank!
dave.trupkin@ames.arpa
Subject: Need info on RS HTX-202
To: info-hams@ucsd.edu

TO:carvalho@inri.com

KB>Post for a friend. He would like opinions on the Radio Shack HTX-202.
KB>Please email responses to 'carvalho@inri.com'

Excellent radio. I own two of them. They come with standard features
like DTMF page and PL decode that are expensive options on other radios.
They have a great reciever for use in high density 2 meter areas.

Almost no intermod.

Wonderful radios.

 . SLMR 2.0 #1961 . Scientific progress goes 'Boink'?

Date: 1 Nov 1993 15:17:10 GMT
From: agate!howland.reston.ans.net!math.ohio-state.edu!news.acns.nwu.edu!
casbah.acns.nwu.edu!rdewan@ames.arpa
Subject: PK232 vs Kenwood
To: info-hams@ucsd.edu

In article <11468@uswnvg.uswnvg.com>, Clay Jackson <cjackso@uswnvg.com> wrote:
>I'm having a heck of a time with my PK-232 and Kenwood TS-680 (the 6M
>version of a TS-140). If I plug the PK-232 into the ACC-2 jack on the
>Kenwood (using an AEA made cable), the TX-audio on the Kenwood goes to
>pot (basically, it acts as if I've got some sort of feedback loop).
>
>I've tried all the "usual" fixes (made sure both the 680 and the 232
>were grounded, strapped the two together, moved 'em apart, etc) and
>nothing seems to help.
>
>I've seen some stuff about other Kenwood rigs - anyone have any
>suggestions?
>

Check "Hints & Kinks" in the latest, Novermber 1993, issue of QST.

Rajiv
aa9ch
r-dewan@nwu.edu

Date: 1 Nov 93 13:58:33 GMT
From: mnemosyne.cs.du.edu!nyx10!lkollar@uunet.uu.net
Subject: Q codes
To: info-hams@ucsd.edu

jangus@skyld.tele.com (Jeffrey D. Angus) writes:

> QKS? and QKS 65/3

> How many knobs and switches on your rig?
> I have 65 knobs and switches, but understand only 3.

> And, least we forget also:

> QLF: Please send with your left foot instead.
> QBS: Please wipe the birdshi* off of you antenna.

I thought that was the *real* reason we could run 1KW -- so we just BURN the
nasty stuff off!

> QPP: I have to go to the bathroom.

I hope the ARRL puts the "Z" codes from the April '92 QST on the mail server...
Those were just as funny as Jeffrey's offerings!
--
Larry Kollar, KC4WZK | Still I don't see a man in a mansion, that an accurate
lkollar@nyx.cs.du.edu | pen won't puncture...
        "You mean you came back from the dead, to tell me I'm *odd*?"

Date: 1 Nov 93 15:50:08 GMT
From: ogicse!uwm.edu!spool.mu.edu!nigel.msen.com!ilium!gdls.com!
usenet@network.ucsd.edu
Subject: Repeater Trivia Question.
To: info-hams@ucsd.edu

Who put the first amateur repeater on the air? When? Where? and what band?

No prize to the winner, only everlasting gratitude :-)

73's

Bill

Date: Mon, 1 Nov 1993 12:40:50 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!pipex!bnr.co.uk!corpgate!
nrtpa038!bnr.ca!harp@network.ucsd.edu
Subject: ZA1QA QSLs
To: info-hams@ucsd.edu

In article <1993Oct28.153250.23382@worldbank.org> dearnshaw@worldbank.org (Darrell

Earnshaw) writes:
>From: dearnshaw@worldbank.org (Darrell Earnshaw)
>Subject: Re: ZA1QA QSLs
>Date: Thu, 28 Oct 1993 15:32:50 GMT
>In article <harp.28.0@bnr.ca> harp@bnr.ca (Alan Harp) writes:
>>Don't know anyone personally who hasn't received their QSLs. I received
>>mine in a reasonable amount of time. Gee it's been more than a year ago
>>now. I have Albania confirmed on all bands except 160 now. Before
>>ZA1A that was unheard of.
>>
>>OH excuse me when I say all bands I mean 160M through 10M. These are the
>>bands I work.
>>
>>***
>>* Alan Harp K4PB   *   Bell-Northern Research   *   CW FOREVER   *
>>* mail: harp@bnr.ca *   Research Triangle Park, NC   *   *
>>***
>>
>Alan,
>Am I correct in assuming you received a card from ZA1QA ? (I got lots of mail
>replies which indicated circumstances similiar to mine - $$ sent, but no
>cards!)
>
>73 Darrell
>
Yes I got my ZA1QAs almost in the same time I got ZA1A. Everyone in our
local DX group got theirs too.

****
* Alan Harp K4PB   *   Bell-Northern Research   *   CW FOREVER   *
* mail: harp@bnr.ca *   Research Triangle Park, NC   *   *
****

End of Info-Hams Digest V93 #1299
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****